

Described herein are genes shown to be essential for programmed cell death in *C. elegans*, their encoded products (RNA and polypeptides), antibodies directed against the encoded polypeptides; probes for identifying structurally related genes and bioassays for identifying functionally related cell death genes from various organisms; methods and agents for altering (increasing or decreasing) the activity of the cell death genes and, thus, of altering cell death; and uses therefor. Specifically, two genes shown to be essential for almost all of the cell deaths which occur in the development of *C. elegans*, referred to as *ced-3* and *ced-4*, have been cloned, sequenced and characterized.